

WHAT IS CLAIMED IS:

1. A mobile communication system including a location management agent for conducting a new location registration and a registration update of a mobile station in a prescribed service area, said mobile communication system comprising:

schedule notifying means for sending moving schedule information at a particular time from said mobile station to said location management agent in advance; and

a location registration database provided in said location management agent for registering the moving schedule information about the mobile station at the particular time such that the moving schedule information has correspondence with a scheduled destination location registration area, wherein

said location management agent, referring to said location registration database, updates the location registration area of the mobile station in the prescribed service area at the particular time.

2. The mobile communication system as claimed in claim 1, wherein

said schedule notifying means includes schedule managing means installed in said mobile station, and said schedule managing means notifies said location

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management agent of the moving schedule information automatically.

3. The mobile communication system as claimed in
5 claim 1, wherein

each location registration area in said prescribed service area comprises a resource management agent for managing a number of its radio channels, and wherein

10 said resource management agent adaptively controls the number of the radio channels to be assigned to the location registration area in response to a command sent from said location management agent, in accordance with the moving schedule information registered in said location registration database.

15 4. The mobile communication system as claimed in claim 2, wherein

each location registration area in said prescribed service area comprises a resource management agent for
20 managing a number of its radio channels, and wherein

said resource management agent adaptively controls the number of the radio channels to be assigned to the location registration area in response to a command sent from said location management agent, in
25 accordance with the moving schedule information registered in said location registration database.

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5. A location registration method of a mobile station in a mobile communication system including a location management agent for conducting a new location registration and a registration update of the mobile station in a prescribed service area, said location registration method of a mobile station in a mobile communication system comprising:

10 a first step of sending moving schedule information at a particular time from said mobile station to said location management agent in advance;

15 a second step of registering, in a location registration database provided in said location management agent, the moving schedule information about the mobile station in correspondence with the particular time and a scheduled destination location registration area at the particular time; and

20 a third step of updating the location registration area of the mobile station in the prescribed service area at the particular time by said location management agent with referring to said location registration database.

6. The location registration method of a mobile station in a mobile communication system as claimed in claim 5, wherein

the first step notifies said location management agent of the moving schedule information automatically

by schedule managing means installed in said mobile station.

7. A resource control method in a mobile

5 communication system conducting a new location registration and a registration update of a mobile station in a prescribed service area, said resource control method in a mobile communication system comprising:

10 a first step of registering moving schedule information about the mobile station in a location registration database of a location management agent such that the moving schedule information has correspondence with moving schedule time, and an
15 original position and a scheduled destination location registration area of the mobile station at the time; and

a second step of adaptively controlling the number of the radio channels to be assigned to the location
20 registration area by a resource management agent installed in each location registration area in the prescribed service area in response to a command sent from said location management agent, in accordance with the moving schedule information registered in said
25 location registration database.

8. A recording medium recording a computer readable

program of a location registration method of a mobile station in a mobile communication system including a location management agent for conducting a new location registration and a registration update of the mobile station in a prescribed service area,

said program causes a computer to execute:

a first step of sending moving schedule information at a particular time from said mobile station to said location management agent in advance;

10 a second step of registering, in a location registration database provided in said location management agent, the moving schedule information about the mobile station in correspondence with the particular time and a scheduled destination location registration area at the particular time; and

15 a third step of updating the location registration area of the mobile station in the prescribed service area at the particular time by said location management agent with referring to said location registration database.

20 9. The recording medium as claimed in claim 8, wherein the first step of said program notifies said location management agent of the moving schedule information automatically by schedule managing means installed in said mobile station.

10. A recording medium recording a computer readable
program of a resource control method in a mobile
communication system conducting a new location
registration and a registration update of a mobile
5 station in a prescribed service area,

said program causes a computer to execute:

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10 a first step of registering moving schedule
information about the mobile station in a location
registration database of a location management agent
such that the moving schedule information has
correspondence with moving schedule time, and an
original position and a scheduled destination location
registration area of the mobile station at the time;
and

15 a second step of adaptively controlling the number
of the radio channels to be assigned to the location
registration area by a resource management agent
installed in each location registration area in the
prescribed service area in response to a command sent
20 from said location management agent, in accordance with
the moving schedule information registered in said
location registration database.